



Human Coch-5B2 cDNA Sequence

1 GCACTCGGGC GCAGCCGGGT GGATCTCGAG CAGGTGTGAG
CAGCCTATCA GTCACCATGT CCGCAGCCTG GATCCCGGCT CTCGGCCTCG
GTGTGTGTCT GCTGCTGCTG CCGGGGCCCCG CGGGCAGCGA GGGAGCCGCT
CCCATTGCTA TCACATGTTT TACCAGAGGC TTGGACATCA GGAAAGAGAA
AGCAGATGTC CTCTGCCCAG GGGGCTGCCC TCTTGAGGAA TTCTCTGTGT
ATGGGAACAT AGTATATGCT TCTGTATCGA GCATATGTGG GGCTGCTGTC
CACAGGGGAG TAATCAGCAA CTCAGGGGGA CCTGTACGAG TCTATAGCCT
ACCTGGTCGA GAAAACTATT CCTCAGTAGA TGCCAATGGC ATCCAGTCTC
AAATGCTTTC TAGATGGTCT GCTTCTTTCA CAGTAACTAA AGGCAAAAGT
AGTACACAGG AGGCCACAGG ACAAGCAGTG TCCACAGCAC ATCCACCAAC
AGGTAAACGA CTAAAGAAAA CACCCGAGAA GAAAACTGGC AATAAAGATT
GTAAAGCAGA CATTGCATTT CTGATTGATG GAAGCTTTAA TATTGGGCAG
CGCCGATTTA ATTTACAGAA GAATTTTGTT GGAAAAGTGG CTCTAATGTT
GGGAATTGGA ACAGAAGGAC CACATGTGGG CCTTGTTCAA GCCAGTGAAC
ATCCCAAAT AGAATTTTAC TTGAAAACT TTACATCAGC CAAAGATGTT
TTGTTTGCCA TAAAGGAAGT AGGTTTCAGA GGGGGTAATT CCAATACAGG
AAAAGCCTTG AAGCATACTG CTCAGAAATT CTTACGGTA GATGCTGGAG
TAAGAAAAGG GATCCCCAAA GTGGTGGTGG TATTTATTGA TGGTTGGCCT
TCTGATGACA TCGAGGAAGC AGGCATTGTG GCCAGAGAGT TTGGTGTCAA
TGTATTTATA GTTTCTGTGG CCAAGCCTAT CCCTGAAGAA CTGGGGATGG
TTCAGGATGT CACATTTGTT GACAAGGCTG TCTGTCGGAA TAATGGCTTC
TTCTCTTACC ACATGCCCAA CTGGTTTGGC ACCACAAAAT ACGTAAAGCC
TCTGGTACAG AAGCTGTGCA CTCATGAACA AATGATGFGC AGCAAGACCT
GTTATAACTC AGTGAACATT GCCTTTCTAA TTGATGGCTC CAGCAGTGTT
GGAGATAGCA ATTTCCGCCT CATGCTTGAA TTTGTTTCCA ACATAGCCAA
GACTTTTGAA ATCTCGGACA TTGGTGCCAA GATAGCTGCT GTACAGTTTA
CTTATGATCA GCGCACGGAG TTCAGTTTCA CTGACTATAG CACCAAAGAG
AATGTCCTAG CTGTCATCAG AAACATCCGC TATATGAGTG GTGGAACAGC
TACTGGTGAT GCCATTTCTT TCACTGTTAG AAATGTGTTT GGCCCTATAA
GGGAGAGCCC CAACAAGAAC TTCCTAGTAA TTGTCACAGA TGGGCAGTCC
TATGATGATG TCCAAGGCC TGCAGCTGCT GCACATGATG CAGGAATCAC
TATCTTCTCT GTTGGTGTGG CTTGGGCACC TCTGGATGAC CTGAAAGATA
TGGCTTCTAA ACCGAAGGAG TCTCATGCTT TCTTCACAAG AGAGTTCACA
GGATTAGAAC CAATTGTTTC TGATGTCATC AGAGGCATTT GTAGAGATTT
CTTAGAATCC CAGCAATAAT GGTAACATTT TGACAACTGA AAGAAAAAGT
ACAAGGGGAT CCAGTGTGTA AATTGTATTC TCATAATACT GAAATGCTTT
AGCATACTAG AATCAGATAC AAAACTATTA AGTATGTCAA CAGCCATTTA
GGCAAATAAG CACTCCTTTA AAGCCGCTGC CTTCTGGTTA CAATTTACAG
TGTACTTTGT TAAAACACT GCTGAGGCTT CATAATCATG GCTCTTAGAA
ACTCAGGAAA GAGGAGATAA TGTGGATTAA AACCTTAAGA GTTCTAACCA
TGCCTACTAA ATGTACAGAT ATGCAAATTC CATAGCTCAA TAAAAGAATC

FIG. 1A

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TGATACTTAG ACCAAAAGCA ACATTCGTTT TCTAACCATT CTGTATTGAT
TATATAAGCA AAATGAAAAG AGAAACTTAA ATGAACACAG CTCTTTAACA
TGGTTCAGGT ACACATATTT TGACCCAAGT GGATATTTTC TTA AAAACCAA
TCAATAATAG CTAGCTATTA CTGCAGACTA TAAAATCTGG ATATAGAAAG
GAGACCTGTA TCAAACGCT TTTGTAGTGT GTTTTCATAA CAACTTATGA
CTAAAAATAT CAACTGAAT AAGAGAGCAG GATTGCCAGG TATTTTCTA
TTTCTCTCCT TAATTTTATA TGTATATAGA TATATTTGGC TTATATTCTA
AGTCACCTAA GTACTTAAAA GTTAAGTTGG TAAAGTATTT ACTGACTGCT
TATAAACATT TAAAGACAAA GACATTTCAA ATAAGTGCAG AAAAAATATT
GTAGTTTGAA TATTTAAGCA ATAAACTGC TAGTGAGTTA TTGT
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FIG. 1B

Human Coch-5B2 Amino Acid Sequence

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1 MSAAWIPALG LGVCLLLLPG PAGSEGAAPI AITCFTRGLD IRKEKADVLC
PGGCPLEEFV VYGNIVYASV SSICGAHVHR GVISNSGGPV RVYSLPGREN
YSSVDANGIQ SQMLSRWSAS FVTKGKSST QEATGQAVST AHPPTGKRLK
KTPEKKTGNK DCKADIAFLI DGSFNIGQRR FNLQKNFVGK VALMLGIGTE
GPHVGLVQAS EHPKIEFYLK NFTAQDVLF AIKEVGFRGG NSNTGKALKH
TAQKFFTVDA GVRKGIPKVV VVFIDGWPSD DIEEEAGIVAR EFGVNVFIVS
VAKPIPEELG MVQDVTVDK AVCRNNGFFS YHMPNWFGTT KYVKPLVQKL
CTHEQMMCSK TCYNSVNIAF LIDGSSSVGD SNFRLMLEFV SNIAKTFEIS
DIGAKIAAVQ FTYDQRTEFS FTDYSTKENV LAVIRNIRYM SGGTATGDAI
SFTVRNVFGP IRESPNKNFL VIVTDGQSYD DVQGPAAAAH DAGITIFSVG
VAWAPLDDLK DMSKPKESH AFFTREFTGL EPIVSDVIRG ICRDFLESQQ
551 *
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FIG. 1C

Mouse Coch-5B2 cDNA Sequence

1 CGGAGCCGCG CTTGCCGCAC TCGGGTGTAG CCGGGCGGAT
CCCACGCAGG TCCACGGAGA TCCTCGCCAT GCCCTCGTCC AGGATCCCTG
CTCTCTGCCT CGGTGCGTGG CTGCTGCTGC TGCTGCTGCC CCGGTTTCGCG
CGCGCCGAGG GAGCGGTTCC CATTCTGTG ACCTGCTTTA CCAGAGGCCT
GGATATCCGA AAAGAGAAAG CAGATGTTCT CTGCCCAGGA GGCTGCTCTC
TTGAGGAATT CTCTGTGTTT GGGAACATAG TGTATGCGTC AGTGTCCAGC
ATCTGCGGCG CTGCTGTCCA TAGGGGAGTG ATTGGCACCT CAGGGGGACC
TGTGCGTGTC TACAGCCTTC CTGGTCGAGA GAACTACTCC TCGGTAGATG
CCAACGGCAT CCAGTCTCAG ATGCTTTCCC GATGGTCCGC GTCCTTCGCT
GTGACCAAAG GCAAAAGCAG TACCCAGGAA GCCACAGGAC GGGCAGTGTC
CACAGCCCAC CCACCTTCAG GTAAAAGACT AAAGAAGACA CCAGAGAAGA
AGACTGGCAA CAAAGACTGT AAGGCAGACA TTGCATTTCT CATTGATGGA
AGCTTCAATA TTGGGCAGCG CCGATTTAAT TTGCAGAAGA ATTTTGTGG
GAAAGTGGCA CTAATGTTGG GAATTGGAAC AGAAGGACCA CACGTGGGTC
TCGTTCAAGC CAGTGAACAC CCCAAAATAG AATTTTACTT GAAAACTTT
ACTTCAGCCA AAGATGTCTT GTTTGCCATA AAAGAAGTAG GTTTCGAGG
GGGTAActCC AACACAGGAA AAGCCTTGAA GCACACTGCT CAGAAATTCT
TTACAGCAGA CACTGGTGTG AGAAAAGGAA TACCAAAGT GGTGGTAGTG
TTTATTGATG GTTGGCCCTC TGATGACATT GAGGAAGCAG GCATTGTGGC
CAGAGAGTTT GGTGTCAATG TATTTATAGT TTCTGTGGCC AAGCCCATTC
CTGAAGAAct GGGGATGGTT CAAGATGTTG CATTGTGTTGA CAAGGCTGTG
TGTCGGAATA ATGGCTTCTT CTCTTATCAC ATGCCCACT GGTGTTGGCAG
TACAAAATAT GTGAAGCCTC TGGTGCAGAA GCTCTGTACG CACGAACAGA
TGATGTGCAG CAAAACCTGC TACAACTCAG TGAACATTGC CTTTCTGATT
GACGGCTCCA GCAGTGTTGG AGATAGCAAT TTCCGCCTCA TGCTAGAATT
TGTTTCTAAC ATAGCGAAGA CATTTGAAAT CTCAGACATT GGAGCCAAGA
TAGCTGCTGT ACAGTTCAct TATGACCAGC GCACCGAGTT CAGTTTCACT
GACTATAATA CCAAAGAGAA CGTCCTAGCT GTCCTAGCGA ACATCCGCTA
CATGAGTGGT GGCACAGCTA CTGGTGATGC CATCGCCTTT ACTGTTAGAA
ATGTATTTGG TCCATAAGG GACAGCCCCA ACAAAAActT CCTGGTTATT
GTCACAGATG GGCAGTCCTA TGATGATGTC CGAGGCCCTG CTGCAGCTGC
CCATGATGCA GGTATCACCA TCTTCTCTGT TGGTGTGGCT TGGGCACCGC
TGGATGACCT GAGAGATATG GCCTCTAAAC CCAAAGAGTC ACACGCTTTC
TTTACCAGAG AGTTCACAGG GTTAGAACCA ATTGTCTCTG ACGTCATCAG
AGGCATTTGT AGAGACTTCT TAGAATCCCA GCAATAACCG ATACTCTGAC
AACTCAAGGA ATACGTGCAA GGGGATCTAA TGTGCAAATT ATATTCTCAA
TGCCTATGTA ACTTTATAGC TTACCACTGT CAAAAAATGC GTCCACAGCT
GTTTAAAGCA AATGAATATT CATGTGATGC TCACAATTTA GATTGGCCGA
GACTTGATAA TCAGGCCCTT AGAACTCAG GAAAGAAGAG TTGTCATGGA
TTAACATTGG GAGTTCAAAT ATGCATTCAA GTGGATAGGT AAGCTACACA
GCTCAATAAA AGAACCTGGC GCTTACACAC AAAGCACTGT TCCCTCTTTA
ATCACTCTGC ATTGACCATG CAAGGAAAAC AGAACAGCTT TTAACACAG

FIG. 2A

ATCAAGTATA CATATTTTGA CCCATGTGGA TGTTTCTTA AAACCAGCCA
AGAACAGACA GCTGTTATTA TGTGCACTAG CCATAACTAC ACATTATATG
GAATCATATA TCAAGCTTCT TTTGTAGTGT GTTTTCATAA CTTGATGGCT
GAAATACCAC ACTGAGTAAA GGTAGGATTG CCTGGTATTT TTCTATTTAT
ATCCTTAATT TTATGTGTAT AGACAGGCAT GTACTCCGAG GACTAAGAAA
ATGTTTAAGC AGATAACTTT TTTTTTTTGA AAAAAAAGAT GTGTCAAGTA
TTGTAACCGA AAAAATACAC AGCTTAATAG CTTGGCTGTC AGCAATAAAA
CTGCTAGTGA CTAAG

FIG. 2B

Mouse Coch-5B2 Amino Acid Sequence

1 MPSSRIPALC LGAWLLLLLL PRFARAEGAV PIPVTCFTRG LDIRKEKADV
LCPGGCSLEE FSVFGNIVYA SVSSICGA AV HRGVIGTSGG PVRVYSLPGR
ENYSSVDANG IQSQMLSRWS ASFAVTKGKS STQEATGRAV STAHPPSGKR
LKKTPKKTG NKDCKADIAF LIDGSFNIGQ RRFNLQKNFV GKVALMLGIG
TEGPHVGLVQ ASEHPKIEFY LKNFTSAKDV LFAIKEVGFR GGNSNTGKAL
KHTAQKFFTA DTGVRKGIPK VVVVFIDGWP SDDIEEAGIV AREFGVNVFI
VSVAKPIPEE LGMVQDVAFV DKA VCRNNGF FSYHMPNWFG TTKYVKPLVQ
KLCTHEQMMC SKTCYNSVNI AFLIDGSSSV GDSNFRLMLE FVSNIAKTFE
ISDIGAKIAA VQFTYDQRTE FSFTDYNTKE NVLAVLANIR YMSGGTATGD
AIAFTVRNVF GPIRDS PNKN FLVIVTDGQS YDDVRGPAAA AHDAGITIFS
VGVAWAPLDD LRDMASKPKE SHAFFTREFT GLEPIVSDVI RGICRDFLES
QQ*

FIG. 2C

1 MSAAWIPALGLG VCLLLLPGPAGSEGAAPIAITCFTRGLDIRKEKADV 48
 1 .PSSR....C..AWLL.....RF.RA...V..PV..... 50
 49 LCPGGCPLLEFSVYGNIVYASVSSICGAAVHRGVISNSGGPVRVYSLPGR 98
 51S.....F.....GT..... 100
 99 ENYSSVDANGIQSQMLSRWSASFTVTKGKSSTQEATGQAVSTAHPPTGKR 148
 101A.....R.....S... 150
 149 LKKTPEKKTGNKDCKADIAFLIDGSFNIGQRRFNLQKNFVGKVALMLGIG 198
 151 200
 199 TEGPHVGLVQASEHPKIEFYLNFTSAKDVLFAlKEVGFRGGNSNTGKAL 248
 201 250
 249 KHTAQKFFTVDAGVRKGIPKVVVVFIDGWPSDDIEEAGIVAREFGVNVFI 298
 251A.T..... 300
 299 VSVAKPIPEELGMVQDVTTFVDKAVCRNNGFFSYHMPNWFGTTKYVKPLVQ 348
 301A..... 350
 349 KLCTHEQMMCSKTCYNSVNIAFLIDGSSSVGDSNFRLMLEFVSNIAKTFE 398
 351 400
 399 ISDIGAKIAAVQFTYDQRTEFSFTDYSTKENVLAVIRNIRYMSGGTATGD 448
 401N.....LA..... 450
 449 AISFTVRNVFGPIRESPNKNFLVIVTDGQSYDDVQGPAAAAHDAGITIFS 498
 451 ..A.....D.....R..... 500
 499 VGVAWAPLDDLKDMASKPKESHAFFTREFTGLEPIVSDVIRGICRDFLES 548
 501R..... 550
 549 QQ* 550
 551 ... 552

FIG. 3

COCH-5B2	VA1	D I A F L I D G S F N I G Q R R F N L Q K N F V G K V A L M L G I G T E G P H V G L V Q A S E H P K
COCH-5B2	VA2	N I A F L I D G S S S V G D S N F R L M L E F V S N I A K T F E I S D I G A K I A A V Q F T Y D Q R
COL12A 1	VA	D L V F L V D G S W S V G R N N F K Y I L D F I A A L V S A F D I G E E K T R V G V V Q Y S S D T R
CMP	A1	D L V F L I D G S K S V R P E N F E L V K K F I S Q I V D T L D V S D K L A Q V G L V Q Y S S S V R
VWF	A3	D V I L L D G S S S F P A S Y F D E M K S F A K A F I S K A N I G P R L T Q V S V L Q Y G S I T T
COCH-5B2	VA1	I E F Y L K N F T S I A K D V L F A I K E V G F R G G N S N T G K A L K H T A Q K F F T V D A G V R K
COCH-5B2	VA2	T E F S F T D Y S T K E N V L A V I R N I R Y M S G G T A T G D A I S F I T V R N V F F G P I R E S P N
COL12A1	VA	T E F N L N Q Y Y Q R D E L L A A I K K I P Y K G G N T M T D A - I D Y L V K N T F T E S A G A R V
CMP	A1	Q E F P L G R F H T K K D I K A A V R N M S Y M E K G T M T G A A L K Y L I D N S F T V S S G A R P
VWF	A3	I D V P W N V V P E K A H L L S L V D V M Q R E G G P S Q I G D A L G F A V R Y L T S E M H G A R P
COCH-5B2	VA1	G I P K V V V F I D G W P S D D I E E A G I V A R E F G V N V F I V S V A K P I P E E L
COCH-5B2	VA2	- - K N F L V I V T D G Q S Y D D V Q G P A A A H D A G I T I F S V G V A W A P L D D L K D M A S
COL12A1	VA	G F P K V A I I I T D G K S Q D E V E I P A R E L R N V G V E V F S L G I K A A D A K E L K Q I A S
CMP	A1	G A Q K V G I V F T D G R S Q D Y I N D A A K A K D L G F K M F A V G V G N A V E D E L
VWF	A3	G A S K A V V I L V T D V S V D S V D A A A D A A R S N R V T V F P I G I

FIG. 4

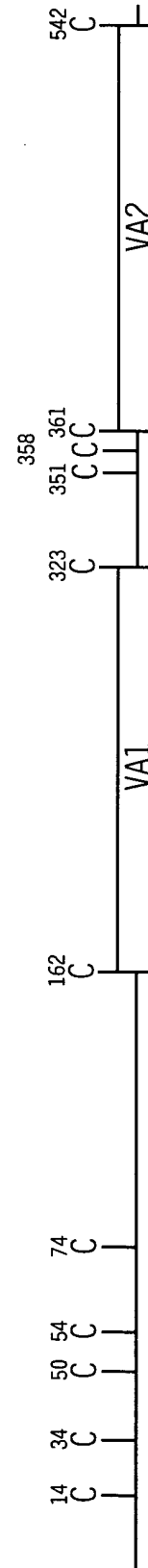


FIG. 5

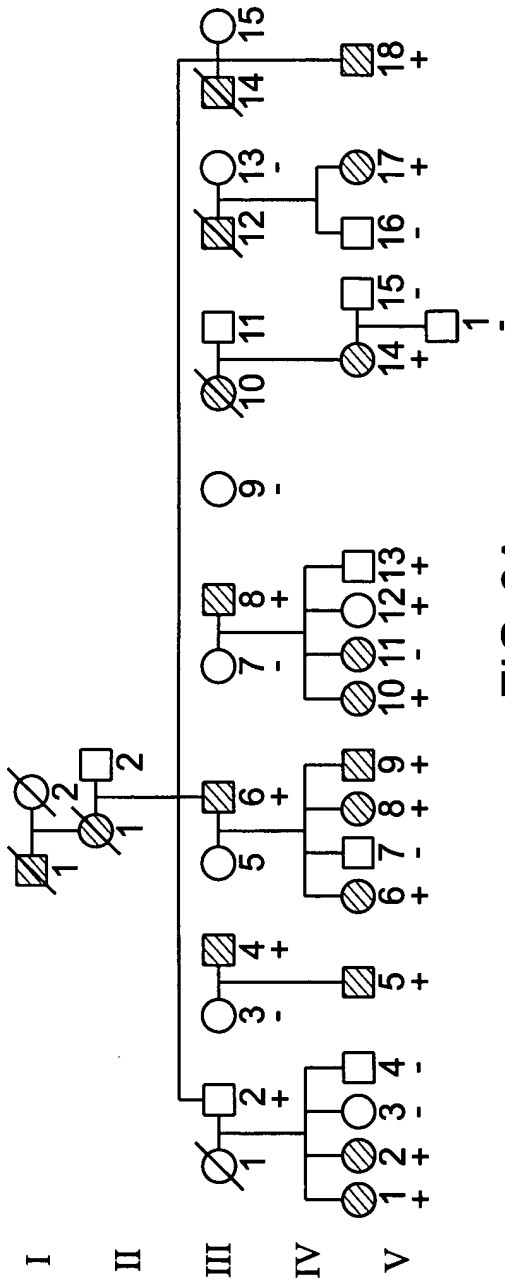


FIG. 6A

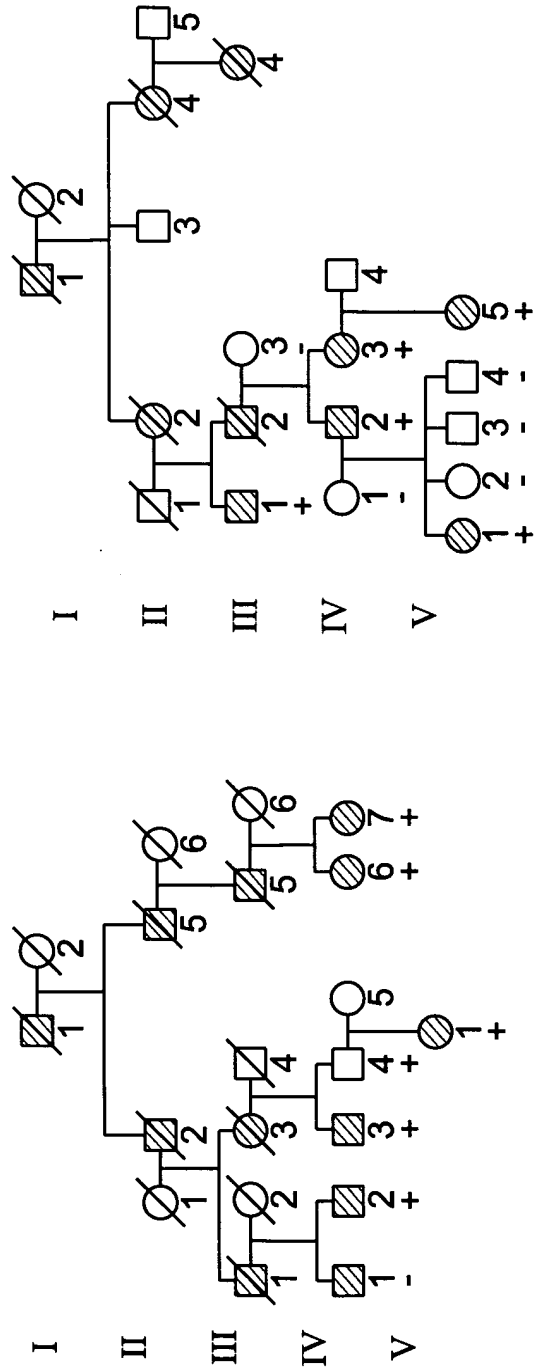


FIG. 6B

FIG. 6C

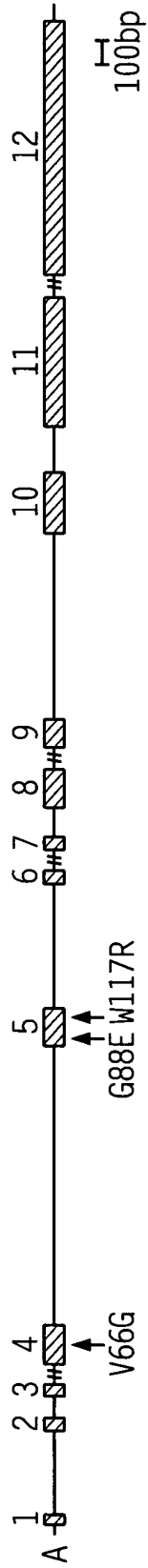


FIG. 7A

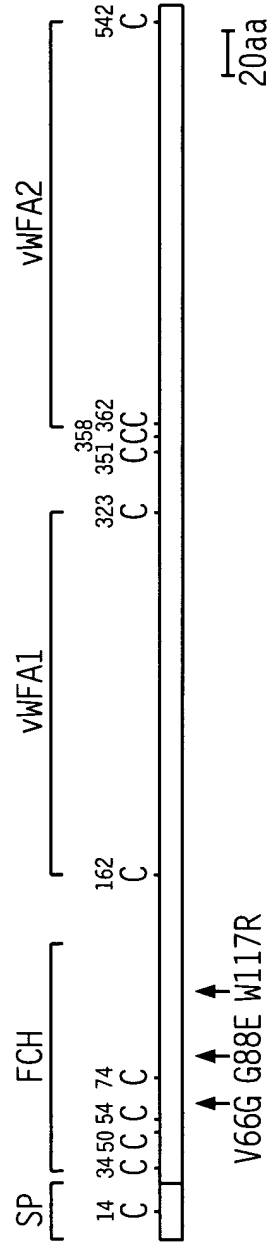


FIG. 7B

[illegible]

FIG. 7C